

PR JP19950020010 19950208

TI - CLASS DESCRIPTION METHOD

PN - JP8212076 A 19960820

AP - JP19950020010 19950208

**OPD** - 1995-02-08

noic

PA - MEIDENSHA ELECTRIC MFG CO LTD

IN - UNNO FUJIYA

IC - G06F9/44

@ WPI / DERWENT

 Class description method e.g. for C++ programming of object oriented paradigm - involves creating template function and exclusively assigns it to type define class

J08212076 The method involves defining a first class (1) and encapsulates data which affect other instances within it. The data that is inherited from exterior is encapsulated within a second class (2). The first class is a data drive class which contains pointers to each of its instances. Whenever data updation takes place notification regarding the same is prepared.

- This notification is fed to virtual functions for the second class which is of client type. Then, a template type define class (4) is formed involving inheritance from the first class. Operator overloading is performed. Template function (F1) is contained within the type define class. Members which are commonly accessible from external are enclosed within public section of the three classes. Keys are assigned to each data member. The data members are distinguished using their corresponding keys.
- ADVANTAGE Reduces programming time. Reduces number of bugs.
- (Dwg.1/1)

PN - JP8212076 A 19960820 DW199643 G06F9/44 005pp

OPD - 1995-02-08

PR - JP19950020010 19950208

PA - (MEID ) MEIDENSHA CORP

IC - G06F9/44

**AN** - 1996-429440 [43]

O PAJ / JPO

TI - CLASS DESCRIPTION METHOD

AB - PURPOSE: To surely and easily change the data when the data of

none none none

Done

classes affect with each offect - CONSTITUTION: A class இ is prepared to secure succession of acords class that is common to the classes which turn the data affecting other instances into capsules, together with a class C2 which secures succession of a class that is common to the classes which are affected by the external data, and a template function F1 which generates a class that overloads an operator in response to each data type and secures succession of the class C1. Thus it is possible to know the positions of classes which are actually different from each other while they are set in a single data array to each other. Then it is not necessary to specify a place where the data are updated by turning the affecting data into capsules. Thereby, the receiving method of the data updating notification is defined as a virtual function to the class C2 and the processing proper to the data which overload the same method to the classes to affect them can be described.

PN - JP8212076 A 19960820

AP - JP19950020010 19950208

PA - MEIDENSHA CORP

IN - UNNO FUJIYA

I - G06F9/44

### (19)日本国特許庁(JP)

# (12) 公開特許公報(A)

### (11)特許出顧公開番号

## 特開平8-212076

(43)公開日 平成8年(1996)8月20日

(51) Int.Cl.

識別記号 庁内整理番号

FI

技術表示箇所

G O 6 F 9/44

530 D 7737-5B

容支請求 未請求 請求項の数1 OL (全 5 頁)

(21)出噸番号

特顯平7-20010

(71)出版人 000006105

株式会社明常会

 東京都品川区大崎2丁目1番17号

(72) 発明者 海野 宮士也

東京都品川区大崎2丁目1番17号 株式会

社明笔合内

(74)代理人 弁理士 志贺 富士弥 (外1名)

### (54)【究明の名称】 クラスの記述方法

#### (57) 【要約】

[目的] 異なるクラスのデータが互いに影響する場合のデータ変更を確実・容易にする。

【構成】 他のインスタンスに影響を与えるデータをカプセル化するクラスに共通のクラスを継承させるクラス C1と、外部のデータの影響を受けるクラスに共通のクラスを継承させるクラス C2と、各データ型に合わせてラスを継承させるためのテンプレート関数 F1とを用なるとができるようにし、影響を見るるアータをカプセル化してデータが更新される場所を多なった。というスの位位を知ることができるようにし、影響をあるカラスの位位を知ることができるようにし、影響を多なを受けるメソッドを仮想関数として定義し、影響を受けるクラスに同名のメソッドをオーバーロードして影響を与えるデータ固有の処理を記述可能にする。

### クラスと関数のデータ・メソッド構成図

